

CLAIMS

What is claimed is:

1. A recombinant polynucleotide sequence encoding an adeno-associated virus (AAV) packaging cassette comprising at least one AAV packaging gene amplifiably linked to an activating element.

2. The packaging cassette of claim 1 wherein the AAV packaging cassette comprises an AAV *rep* gene and an AAV *cap* gene.

3. The packaging cassette of claim 1 wherein the activating element is a P1 element.

4. The packaging cassette of claim 1 wherein the activating element is an inducible replication origin.

5. The packaging cassette of claim 1 wherein the activating element is a replication origin that is activated by helper function.

6. The packaging cassette of claim 5 wherein the helper function is provided by adenovirus.

7. The packaging cassette of claim 1 wherein the activating element comprises a viral replication origin.

8. The packaging cassette of claim 7 wherein the viral replication origin is dependent on helper function.

9. The packaging cassette of claim 8 wherein the helper function is provided by adenovirus.

10. The packaging cassette of claim 1 wherein the activating element comprises a mammalian replication origin.

11. The packaging cassette of claim 2 wherein the activating element comprises a sequence having activity in a replication assay.

5 12. The packaging cassette of claim 11 wherein the replication activity is Rep-dependent.

13. The packaging cassette of claim 1, wherein said activating element comprises a Rep Binding Motif and a Terminal Resolution site.

10 14. A method for producing high-titer stocks of an rAAV vector containing a heterologous gene of interest, comprising co-expressing the rAAV vector containing a gene of interest in a mammalian cell along with an AAV packaging cassette, said AAV packaging cassette comprising at least one AAV *rep* and/or *cap* gene amplifiably linked to
15 an activating element.

15. The method of claim 14 wherein the activating element is a P1 element.

20 16. The method of claim 14 wherein the activating element is a replication origin that is activated by helper function.

17. The method of claim 16 wherein the helper function is provided by adenovirus.

25 18. The method of claim 14 wherein the activating element is an inducible replication origin.

30 19. A method for generating a cell line capable of producing high-titer stocks of an rAAV vector containing a foreign gene of interest, by transfecting mammalian cells with an rAAV vector containing a gene of interest and with an AAV packaging cassette, said AAV packaging cassette comprising at least one AAV *rep* and/or *cap* gene amplifiably linked to an activating element.

20. The method of claim 19 wherein the activating element is a P1 element.

21. The method of claim 19 wherein the activating element is a replication origin that is activated by helper function.

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22. The method of claim 21 wherein the helper function is provided by adenovirus.

23. The method of claim 19 wherein the activating element is an inducible replication origin.

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24. An AAV packaging cell line produced by the method of claim 23.

25. An AAV virus containing an rAAV vector produced by the method of claim
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